#### DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

### WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-019789 Address: 333 Burma Road **Date Inspected:** 14-Dec-2010

City: Oakland, CA 94607

OSM Arrival Time: 1900 **Project Name:** SAS Superstructure **OSM Departure Time:** 700 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

**CWI Name:** See below **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No **Weld Procedures Followed:** Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes N/A **Delayed / Cancelled:** No

34-0006 **Bridge No: Component:** OBG

## **Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector, Kelly Leavitt, was present during the times noted above for observations relative to the work being performed.

This QA Inspector observed the following work in progress:

Bay 10

This QA Inspector observed the following work in progress for Bay 10.

ZPMC was using the Flux Core Arc Welding (FCAW) process.

ZPMC QC is identified as Li Ping Fei.

Welding variables recorded by QC appeared to comply with the approved Welding Procedure Specification (WPS).

Listed below are the locations that were identified by this QA Inspector.

Component; Bike Path PCMK: BK004A2-029

Weld No: 014,015,017,019,020

Welder: 040434

WPS-B-T-2232-ESAB

Heat straightening of PCMK, BK004A1-030 under approved Heat Straightening procedure, HSR1(B)-9865. The in process temperature was observed as 230°C. The ZPMC QC was identified as Li Ping Fei. The approved HSR procedure stated that a maximum temperature of 600°C with 1~3 numbers of applications was allowed. The

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distortion that was previously measured and recorded on the HSR was Maximum 20mm.

Trial Assembly

This QA Inspector observed the following work in progress for Trial Assembly.

ZPMC was using the Shielded Metal Arc Welding (SMAW) process.

ZPMC QC is identified as Wong Li Yang, CWI Shi Lei.

Welding variables recorded by QC appeared to comply with the approved Welding Procedure Specification (WPS).

Listed below are the locations that were identified by this QA Inspector.

Component; OBG12AE TO 12BE

PCMK: SP3001-001 Weld No: 081,082 Welder: 040320

WPS-B-P-2214-B-U2-Fen-1

Component; OBG12AE TO 12BE

PCMK: SP3002-001 Weld No: 091~197 Welder: 053871

WPS-B-P-2214-B-U2-Fen-1

This QA Inspector observed the following work in progress for Trial Assembly.

ZPMC was using the Flux Core Arc Welding (FCAW) process.

ZPMC QC is identified as Wong Li Yang, CWI Shi Lei.

Welding variables recorded by QC appeared to comply with the approved Welding Procedure Specification (WPS).

Listed below are the locations that were identified by this QA Inspector.

Component; OBG12AE TO 12BE

PCMK: SEG3001A-001

Weld No: 004 Welder: 040458 WPS-B-T-2231-ESAB

Component; OBG12AE TO 12BE

PCMK: BP3001-004, T rib hold back area

Weld No: 060 Welder: 040458

WPS-B-T-2132-ESAB

Component; OBG12AE TO 12BE

PCMK: OBE12B-001

Weld No: 011 Welder: 047353

WPS-B-T-2231-ESAB

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This QA inspector performed MT of approximately 15% of an area that has been previously tested and accepted by ZPMC Quality Control (QC) personnel. This QA Inspector generated an MT report for this date. The member was identified as OBG 11DW. The weld designations reviewed are as follows: SSD22-PP104.5-001,002, SSD22-PP105.5-001,002, SSD22-PP106.5-001,002

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

### **Summary of Conversations:**

No significant conversations

### **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 15000422372, who represents the Office of Structural Materials for your project.

Inspected By:	Leavitt,Kelly	Quality Assurance Inspector
Reviewed By:	Riley,Ken	QA Reviewer